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(54) Title: METHOD AND SYSTEM FOR MONITORING AND CONTROLLING A MANUFACTURING SYSTEM

(57) Abstract

Neural network models interface with distributed control systems associated with a manufacturing facility for performing a manufacturing facility. The neural network models receive measured variables of the manufacturing process to predict process performance data, and provide the performance data on a real-time basis to a communications server. A graphical user interface communicates over a network, such as the Internet or a corporate Intranet, to receive the real-time performance data, including performance metrics such as key performance real-time analyzers, for presentation to aid managers in making decisions regarding the manufacturing process. The communications server also interfaces with an off-line model engine to transfer the neural network model and real-time performance data for analysis on the off-line engine. Object oriented box transforms enhance publication and subscription of the performance data from the neural network models.

